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C L A I M S

1. A biologically-degradable or bio-soluble glass fiber composition, characterized in that it comprises the
5 following components expressed in percent by weight:

- SiO₂: 61 to 66;
- Al₂O₃: 1.1 to 2.1;
- (CaO+MgO) : higher than 9;
- (Na₂O+K₂O) : higher than 18;
10 - B₂O₃: 4 to 15;
- P₂O₅: 0 to 5;
- SO₃: 0 to 1;
- Fe₂O₃: 0 to 0.5;
- Others: less than 2.

15 2. The composition as claimed in claim 1, characterized in that it comprises the following components expressed in percent by weight:

- SiO₂: 61 to 66;
20 - Al₂O₃: 1.1 to 2.1;
- CaO: 6 to 9;
- MgO: 0 to 5;
- (Na₂O+K₂O) : higher than 18;
- B₂O₃: 4 to 15;
25 - P₂O₅: 0 to 5;
- SO₃: 0 to 1;
- Fe₂O₃: 0 to 0.5;
- Others: less than 2.

30 3. The composition as claimed in claim 1, characterized in that it comprises the following components expressed in percent by weight:

- SiO₂: 61 to 66;
- Al₂O₃: 1.1 to 2.1;
35 - (CaO+MgO) : higher than 9;
- Na₂O: higher than 17.5, lower than or equal

to 23;
- K₂O: 0.6 to 2;
- B₂O₃: 4 to 15;
- P₂O₅: 0 to 5;
5 - SO₃: 0 to 1;
- Fe₂O₃: 0 to 0.5;
- Others: less than 2.

4. The composition as claimed in anyone of the preceding
10 claims, characterized in that it comprises the following
components expressed in percent by weight:

- SiO₂: 61 to 66;
- Al₂O₃: 1.1 to 2.1;
- CaO: 6 to 9;
15 - MgO: 0 to 5;
- Na₂O: higher than 17.5, lower than or equal
to 23;
- K₂O: 0.6 to 2;
- B₂O₃: 4 to 15;
20 - P₂O₅: 0 to 5;
- SO₃: 0 to 1;
- Fe₂O₃: 0 to 0.5;
- Others: less than 2.

25 5. The composition as claimed in claim 4, characterized
in that it comprises the following components expressed
in percent by weight:

- SiO₂: 61 to 66;
- Al₂O₃: 1.1 to 1.80;
30 - (CaO+MgO): higher than 9;
- Na₂O: 17.50 to 18.50;
- K₂O: 0.6 to 1;
- B₂O₃: 5 to 15;
- P₂O₅: 0 to 5;
35 - SO₃: 0 to 1;
- Fe₂O₃: 0 to 0.5;

- 17 -

- Others: less than 2.

6. The composition as claimed in claim 5, characterized in that it comprises the following components expressed 5 in percent by weight:

- SiO₂: 61 to 66;
- Al₂O₃: 1.1 to 1.25;
- (CaO+MgO): higher than 9;
- Na₂O: 17.50 to 18.50;
10 - K₂O: 0.6 to 1;
- (B₂O₃+P₂O₅): higher than 5;
- SO₃: 0 to 1;
- Fe₂O₃: 0 to 0.5;
- Others: less than 2.

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7. The composition as claimed in claim 6, characterized in that it comprises the following components expressed in percent by weight:

- SiO₂: 61 to 66;
20 - Al₂O₃: 1.1 to 1.25;
- (CaO+MgO): higher than 9;
- Na₂O: 17.50 to 18.50;
- K₂O: 0.6 to 1;
- B₂O₃: higher than 5;
25 - P₂O₅: 0 to less than 0.1;
- SO₃: 0 to 1;
- Fe₂O₃: 0 to 0.5;
- Others: less than 2.

30 8. The composition as claimed in claim 7, characterized in that it comprises the following components expressed in percent by weight:

- SiO₂: 61 to 66;
- Al₂O₃: 1.1 to 1.25;
35 - (CaO+MgO): higher than 9;
- Na₂O: 17.50 to 18.50;

- K₂O: 0.6 to 1;
- B₂O₃: higher than 5.5;
- P₂O₅: 0 to less than 0.1;
- SO₃: 0 to 1;
5 - Fe₂O₃: 0 to 0.5;
- Others: less than 2.

9. The composition as claimed in claim 6, characterized
in that it comprises the following components expressed
10 in percent by weight:

- SiO₂: 61 to 66;
- Al₂O₃: 1.1 to 1.25;
- (CaO+MgO): higher than 9;
- Na₂O: 17.50 to 18.50;
15 - K₂O: 0.6 to 1;
- B₂O₃: less than 5;
- P₂O₅: 0.75 to 1.5;
- SO₃: 0 to 1;
- Fe₂O₃: 0 to 0.5;
20 - Others: less than 2.

10. The composition as claimed in claim 9, characterized
in that it comprises the following components expressed
in percent by weight:

25 - SiO₂: 61 to 66;
- Al₂O₃: 1.1 to 1.25;
- (CaO+MgO): higher than 9;
- Na₂O: 17.50 to 18.50;
- K₂O: 0.6 to 1;
30 - B₂O₃: less than 4.5;
- P₂O₅: 0.75 to 1.5;
- SO₃: 0 to 1;
- Fe₂O₃: 0 to 0.5;
- Others: less than 2.

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11. The composition as claimed in claim 5, characterized

in that it comprises the following components expressed
in percent by weight:

- SiO₂: 61 to 66;
- Al₂O₃: 1.1 to 1.25;
- 5 - (CaO+MgO): higher than 9;
- Na₂O: 17.50 to 18.50;
- K₂O: 0.6 to 1;
- B₂O₃: 5 to 15;
- P₂O₅: 0 to 5;
- 10 - SO₃: 0.1 to 0.5;
- Fe₂O₃: 0 to 0.5;
- Others: less than 2.

12. The composition as claimed in claim 5, characterized
15 in that it comprises the following components expressed
in percent by weight:

- SiO₂: 61 to 66;
- Al₂O₃: 1.1 to 1.25;
- (CaO+MgO): higher than 9;
- 20 - Na₂O: 17.50 to 18.50;
- K₂O: 0.6 to 1;
- B₂O₃: 5 to 15;
- P₂O₅: 0 to 5;
- SO₃: 0 to 1;
- 25 - Fe₂O₃: 0.05 to 0.2;
- Others: less than 2.

13. The composition as claimed in claim 5, characterized
in that it comprises the following components expressed
30 in percent by weight:

- SiO₂: 61 to 66;
- Al₂O₃: 1.6 to 1.8;
- (CaO+MgO): higher than 9;
- MgO: higher than 3;
- 35 - MgO: preferably higher than 3.50;
- Na₂O: 17.50 to 18.50;

- 20 -

- K ₂ O:	0.6 to 1.5;
- B ₂ O ₃ :	5 to 15;
- P ₂ O ₅ :	less than 0.1;
- SO ₃ :	less than 0.35;
5 - Fe ₂ O ₃ :	higher than zero;
- Others:	less than 2.

14. The composition as claimed in claim 5, characterized in that it comprises the following components expressed 10 in percent by weight:

- SiO ₂ :	61 to 66;
- Al ₂ O ₃ :	1.6 to 1.8;
- (CaO+MgO):	higher than 9;
- (Na ₂ O+K ₂ O):	higher than or equal to 18.5 and lower than or equal to 23;
15 - K ₂ O:	0.6 to 1.5;
- B ₂ O ₃ :	5 to 15;
- P ₂ O ₅ :	less than 0.1;
- SO ₃ :	0.1 to 0.25;
20 - Fe ₂ O ₃ :	higher than 0;
- Others:	less than 2.

15. The composition as claimed in claim 5, characterized in that it comprises the following components expressed 25 in percent by weight:

- SiO ₂ :	61 to 66;
- Al ₂ O ₃ :	1.6 to 1.8;
- (CaO+MgO):	higher than 9;
- MgO:	higher than 3;
30 - MgO:	preferably higher than 3.50;
- (Na ₂ O+K ₂ O):	higher than or equal to 18.5 and lower than or equal to 23;
- K ₂ O:	0.6 to 1.5;
- B ₂ O ₃ :	5 to 15;
35 - P ₂ O ₅ :	less than 0.1;
- SO ₃ :	0.1 to 0.25;

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- 21 -

- Fe₂O₃: higher than 0;
- Others: less than 2.

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